

REMARKS

This is a full and timely response to the outstanding non-final Office Action mailed June 4, 2008. Through this response, independent claims 82 and 98 have been amended, and claims 106 and 107 have been added. Reconsideration and allowance of the application and pending claims 82-107 are respectfully requested.

I. Claim Rejections - 35 U.S.C. § 103(a)

A. Statement of the Rejection

Claims 82-92, 94, 95, 97, 98, 100 and 104 have been rejected under 35 U.S.C. § 103(a) as allegedly unpatentable over *Lasky* ("*Lasky*," U.S. Pat. No. 6,367,078) in view of *Mankovitz* ("*Mankovitz*," U.S. Pat. No. 6,760,537). Claim 93 has been rejected under 35 U.S.C. § 103(a) as allegedly unpatentable over *Lasky* in view of *Mankovitz*, as applied to claim 82, and in further view of *Amano* ("*Amano*," U.S. Pat. No. 5,585,865). Claims 96, 99, 101-103 and 105 have been rejected under 35 U.S.C. § 103(a) as allegedly unpatentable over *Lasky* in view of *Mankovitz*, as applied to claim 95, and in further view of *Yuen* ("*Yuen*," U.S. Pat. No. 5,673,089). Applicants respectfully traverse these rejections.

B. Discussion of the Rejection

The M.P.E.P. § 2100-116 states:

Office policy is to follow *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), in the consideration and determination of obviousness under 35 U.S.C. 103. . . the four factual inquiries enunciated therein as a background for determining obviousness are as follows:

- (A) Determining the scope and contents of the prior art;
- (B) Ascertaining the differences between the prior art and the claims in issue;
- (C) Resolving the level of ordinary skill in the pertinent art; and
- (D) Evaluating evidence of secondary considerations.

Further, It is well established at law that, for a proper rejection of a claim under 35 U.S.C. §103 as being obvious based upon a combination of references, the cited

combination of references must disclose, teach, or suggest (either implicitly or explicitly) all elements/features/steps of the claim at issue. See, e.g., *In re Dow Chemical*, 5 U.S.P.Q.2d 1529, 1531 (Fed. Cir. 1988); *In re Keller*, 208 U.S.P.Q.2d 871, 881 (C.C.P.A. 1981).

In the present case, it is respectfully submitted that a *prima facie* case for obviousness is not established using the art of record.

1. Claims 82-92, 94, 95, 97, 98, 100 and 104 - 35 U.S.C. § 103(a) -Lasky in view of Mankovitz

Independent Claim 82

Claim 82 recites (with emphasis added):

82. In a television network, a terminal for providing television program information and television programs, said terminal comprising:
a memory configured for storing a first data and a second data, said first data including respective program information for a plurality of corresponding television programs, said second data different than the first data, **said second data comprising a channel table that includes a plurality of assigned channel categories to television channels, wherein the channel table includes a listing of a plurality of channels and a respective bit mask for each channel, each bit mask comprising a plurality of single bits with each bit of the bit mask set at one of a plurality of respective values, wherein each bit of the bit mask refers to a predetermined category and wherein the respective value at which each bit is set indicates whether or not the predetermined category corresponding to that bit is assigned to the respective channel, the channel table comprising at least one channel entry comprising more than one category;** and
a processor, coupled to the memory, the processor configured to **simultaneously search at least a portion of the channel table for data related to at least one channel to which a category is assigned and causing the display of at least one television program,** the processor further configured to receive selection of a channel category and, in response to receiving selection of the channel category, provide program information associated with the at least one channel to which the selected channel category is assigned.

Applicants respectfully submit that a *prima facie* case of obviousness has not been set forth using the combination of *Lasky* and *Mankovits*. For instance, Applicants respectfully submit that *Lasky* in view of *Mankovitz* fails to disclose, teach, or suggest at least the above-emphasized claim features. The Office Action (page 3) alleges that the claimed first data equates to program guide information provided in the records residing in the program guide database, and that the claimed second data, and in particular, the claimed “**channel table**” equates to the EPG of *Lasky*. Since it is unclear which EPG of *Lasky* (e.g., internal spreadsheet or master guide) is referenced, Applicants will address the rejection based on each EPG of *Lasky*, starting with the spreadsheet (see, e.g., col. 5, lines 50-63 of *Lasky*).

Applicants respectfully submit that the spreadsheet (EPG) is not the same as or equivalent to the claimed features. The **channel table** recited in claim 82 requires a **plurality of assigned channel categories to television channels**. In contrast, the “spreadsheet” that is caused to be “graphically displayed on the television receiver” (see, col. 5, lines 54-55, *Lasky*) merely has channel numbers, times, and titles. There are no categories provided for in the EPG. Indeed, the “hat” of *Lasky* that includes the “existence of other channels carrying programs in the same category” is “superimposed for a few seconds at the top of the displayed video” (see col. 6, lines 28-30, *Lasky*), and hence is not the EPG. That is, categories are part of the displayed “hat” and not the EPG in *Lasky*. To the extent *Lasky* is relied upon for alleged disclosure of the **channel table** features, Applicants respectfully submit that *Lasky*’s EPG (spreadsheet) does not equate to the claimed “channel table,” and for at least this reason, the rejection should be withdrawn.

Assuming the intent of the Office Action is to equate the master program guide with the claimed **channel table**, Applicants respectfully submit that this equality likewise is in error since there is no disclosure of searching the master simultaneously with the

causing of a display. Further, *Lasky* does not disclose or suggest that the master guide comprises **at least one channel entry comprising more than one category** as recited in the amended claim 82. To the extent *Lasky* is relied upon for alleged disclosure of the **channel table** features, Applicants respectfully submit that *Lasky*'s EPG (master guide) does not equate to the claimed "channel table," and for at least this reason, the rejection should be withdrawn.

In addition, with regard to the simultaneous display/search features, the Office Action (page 3) alleges the following:

(The processor displays a television program and at the same time, searches for other channels carrying programs in the same category – column 6, lines 31-49. The control program also reads the current time and determines whether any other program is current – column 6, lines 50-67).

Applicants respectfully disagree. The discussion of a search of programs referenced in the above-citations of *Lasky* appears to be directed to a search of database records as described in Figures 9A-9B (see also, cols. 8-9 of *Lasky*), and not a search of the spreadsheet or master guide (EPG). Hence, *Lasky* does not disclose or suggest the claimed simultaneous search of a **portion of the channel table** and display features. For at least this additional reason, Applicants respectfully request that the rejection be withdrawn.

Additionally, the Office Action (page 4) makes the following allegations and acknowledgement of at least some of *Lasky*'s deficiencies as follows:

...said channel table further includes a plurality of respective bit fields, wherein at least one of the bits refers to a predetermined category (col. 5 lines 64-67, col. 6 Lines 1-20, program guide database contains record for each program, figure 5 item 52, col. 5 lines 30-45, data input module 56, col. 6 lines 1-20, receiving program guide information from television distribution network, col. 6, lines 1-20, title field, time slot, end offset, start offset, length, and category information)...However, *Lasky* fails to disclose that said plurality of respective bit fields include a plurality of bits with respective values, wherein each bit value corresponds to a different category, as recited in the claims.

Applicants note that claim 82 does not recite “bit fields,” but rather, a **bit mask**, which is not disclosed in *Lasky*. Further, the Office Action appears to improperly intermingle the EPG (spreadsheet or master guide) with the database records, which are actually described in *Lasky* as distinct entities. The database records are populated from the extraction of select entries in a received master program guide by the data-input module 56, where the balance of the guide is discarded (see, e.g., col. 6, lines 15-19, *Lasky*).

The Office Action (pages 4-5) uses *Mankovitz* to allegedly remedy the acknowledged deficiencies of *Lasky*, alleging that “Mankovitz discloses that a record for each channel/program includes a listing of a plurality of channels and a respective bit mask for each channel.” Applicants respectfully disagree. *Mankovitz* does not disclose that a record comprises a **listing** of channels. For instance, the referenced section of *Mankovitz* (col. 49, lines 36-67) does not disclose that each record comprises a listing of channels, but in fact, discloses that “[E]ach television program would correspond to one record of the database,” and that “each record would include a series of boolean fields, each field representing a certain category...” (see, e.g., col. 49, lines 44-50, *Mankovitz*). Further, assume *arguendo* each boolean field can be equated to a **bit mask**. Whereas claim 82 recites **wherein each bit of the bit mask refers to a predetermined category**, *Mankovitz* appears to utilize several fields to cover more than one category (i.e., one field does not equate to several categories). Accordingly, the claimed features are simply not disclosed.

In addition, even assuming *arguendo* equality between a **bit mask** and the boolean fields of *Mankovits*, Applicants respectfully submit that it is not obvious to “modify the program guide database, as taught by *Lasky*, using the bit masking technique, as taught by *Mankovitz*, for the purpose of allowing many different categories to be easily represented and searched, while taking up little space.” (Office Action, page

5). For instance, whether dealing with *Mankovitz* or *Lasky*, neither use a ***channel table*** to initially facilitate searching in the manner claimed, but rather, still rely on interrogation of all the individual database records to perform searching. Claim 82, on the other hand, recites features that rely upon the ***channel table*** as the basis for the searching. For this additional reason, Applicants respectfully submit that a *prima facie* case of obviousness has not been established, and respectfully request that the rejection be withdrawn.

Because independent claim 82 is allowable over *Lasky* in view of *Mankovitz*, dependent claims 83-92 and 94 are allowable as a matter of law for at least the reason that the dependent claims 83-92 and 94 contain all elements of their respective base claim. See, e.g., *In re Fine*, 837 F.2d 1071 (Fed. Cir. 1988).

Independent Claim 95

Claim 95 recites (with emphasis added):

95. In a television network, a terminal for providing television program information and television programs, said terminal comprising:

an interface to the television network, said interface configured for receiving a first data and a second data, said first data including respective program information for a plurality of corresponding television programs, said second data comprising a ***channel table***, wherein the ***channel table includes a listing of a channels and a plurality of respective bit mask for each channel, each bit mask comprising a plurality of single bits with each bit of the bit mask set at one of a plurality of respective values, each bit of the bit mask refers to a predetermined category and wherein the respective value at which each bit is set indicates whether or not the predetermined category corresponding to that bit is assigned to the respective channel***; and

a processor, configured to ***simultaneously search at least a portion of the channel table for data related to at least one channel to which a category is assigned and display at least one television program***, the processor further configured to receive selection of a channel category and, in response to receiving selection of the channel category, provide program information associated with at least one channel to which the selected category is assigned.

Applicants respectfully submit that a *prima facie* case of obviousness has not been set forth using the combination of *Lasky* and *Mankovits*. For instance, Applicants respectfully submit that *Lasky* in view of *Mankovitz* fails to disclose, teach, or suggest at least the above-emphasized claim features. The Office Action (pages 8-9) alleges that the claimed ***first data*** equates to program guide information received from the network. The Office Action does not appear to directly address the ***second data*** and its alleged equivalent, though indirectly equates the EPG to the second data by virtue of the allegation on page 9 that the ***channel table*** equates to the EPG. It is noted that claim 95 requires an ***interface*** to the network that receives the ***first*** and ***second*** (including the channel table) data. Accordingly, the ambiguity in the Office Action as to what constitutes the ***first*** and ***second data***, as described in association with the response to the rejection of claim 82, is absent here. That is, the only program guide-related information disclosed as being

received from the distribution network is the master guide (see, e.g., col. 6, lines 1-19, *Lasky*) from which program guide information is later extracted.

Applicants respectfully submit that the Office Action has taken an unreasonably broad interpretation of **first** and **second data**, since evidently, it is one data that has been received from the distribution network in *Lasky*, namely – EPG data (in the form of a master guide). One would not reasonably allege that a table is received as second data and that information in the table is received as first data. Not only is this interpretation presented in the Office Action unreasonable, it is not one which would reasonably be taken by one having ordinary skill in the art in the context of Applicants' specification. For instance, Applicants' disclosure (and claim 95) provides an embodiment where first and second data are received (see, e.g., page 8, lines 3-21). As set forth in MPEP 2111 and well-established Federal case law:

The Patent and Trademark Office ("PTO") determines the scope of claims in patent applications not solely on the basis of the claim language, but upon giving claims their broadest reasonable construction "in light of the specification as it would be interpreted by one of ordinary skill in the art." *In re Am. Acad. of Sci. Tech. Ctr.*, 367 F.3d 1359, 1364[, 70 USPQ2d 1827] (Fed. Cir. 2004).

Accordingly, Applicants respectfully request that the rejection be withdrawn.

In addition, with regard to the simultaneous display/search features, the Office Action (page 9) alleges the following:

(The processor displays a television program and at the same time, searches for other channels carrying programs in the same category – column 6, lines 31-49. The control program also reads the current time and determines whether any other program is current – column 6, lines 50-67).

Applicants respectfully disagree, and respectfully submit that the improper construction of the claims as described above has rendered this argument both invalid and/or unreasonable. That is, the citations to *Lasky* appear to pertain to searches of database

records to provide for sideways scrolls, and do not involve the received master guide (assuming *arguendo* equivalent to the claimed channel table). For at least this additional reason, Applicants respectfully request that the rejection be withdrawn.

Additionally, the Office Action (pages 9-10) makes the following allegations and acknowledgement of at least some of *Lasky*'s deficiencies as follows:

...said channel table further includes a plurality of respective bit fields, wherein at least one of the bits refers to a predetermined category (col. 5 lines 64-67, col. 6 Lines 1-20, program guide database contains record for each program, figure 5 item 52, col. 5, lines 30-45, data input module 56, col. 6 lines 1-20, receiving program guide information from television distribution network, col. 6, lines 1-20, title field, time slot, end offset, start offset, length, and category information)...However, *Lasky* fails to disclose that said plurality of respective bit fields include a plurality of bits with respective values, wherein each bit value corresponds to a different category, as recited in the claims.

Applicants note that claim 95 does not recite bit fields, but rather, a ***bit mask***, which is not disclosed in *Lasky*. Further, the Office Action appears to improperly intermingle the EPG (spreadsheet or master guide) with the database records, which are actually described in *Lasky* as distinct entities. The database records are populated from the extraction of select entries in a received master program guide by the data-input module 56, where the balance of the guide is discarded (see, e.g., col. 6, lines 15-19, *Lasky*).

The Office Action (page 10) uses *Mankovitz* to allegedly remedy the acknowledged deficiencies of *Lasky*, alleging that "Mankovitz discloses that a record for each channel/program includes a listing of a plurality of channels and a respective bit mask for each channel." Applicants respectfully disagree. *Mankovitz* does not disclose that a record comprises a ***listing*** of channels. For instance, the referenced section of *Mankovitz* (col. 49, lines 36-67) does not disclose that each record comprises a listing of channels, but in fact, discloses that "[E]ach television program would correspond to one record of the database," and that "each record would include a series of boolean fields, each field representing a certain category..." (see, e.g., col. 49, lines 44-50, *Mankovitz*).

Further, assume *arguendo* each boolean field can be equated to a **bit mask**. Whereas claim 95 recites ***each bit of the bit mask refers to a predetermined category***, *Mankovitz* appears to utilize several fields to cover more than one category (i.e., one field does not equate to several categories).

In addition, even assuming *arguendo* equality between a **bit mask** and the boolean fields of *Mankovits*, Applicants respectfully submit that it is not obvious to “modify the program guide database, as taught by Lasky, using the bit masking technique, as taught by Mankovitz, for the purpose of allowing many different categories to be easily represented and searched, while taking up little space.” (Office Action, page 10). For instance, whether dealing with *Mankovitz* or *Lasky*, neither use a **channel table** to initially facilitate searching in the manner claimed, but rather, still rely on interrogation of the individual database records to perform searching. Claim 95, on the other hand, recites features that rely upon the channel table as the basis for the searching. For this additional reason, Applicants respectfully submit that a *prima facie* case of obviousness has not been established, and respectfully request that the rejection be withdrawn.

Because independent claim 95 is allowable over *Lasky* in view of *Mankovitz*, dependent claim 97 is allowable as a matter of law.

Independent Claim 98

Claim 98 recites (with emphasis added):

98. In a television network, a terminal for providing television program information and television programs, said terminal comprising:

a memory configured for storing respective program information for a plurality of corresponding television programs and a ***channel table that includes respective associations of one or more channel categories for a plurality of corresponding television channels, wherein the channel table includes a listing of a plurality of channels and respective bit mask for each channel, each bit mask comprising a plurality of single bits with each bit of the bit mask set at one of a plurality of respective values, wherein each bit of the bit mask refers to a predetermined category and wherein the respective value at which each bit is set indicates whether or not the predetermined category corresponding to that bit is assigned to the respective channel, the channel table comprising at least one channel entry comprising more than one category***; and

a processor, coupled to the memory, for causing the display of a browse banner on top of a portion of a first television program being displayed responsive to receiving an initial activation of a browse command, said browse banner comprising first program information, said first program information corresponding to a second television program different than the first television program, wherein the processor causes the display of said browse banner on top of the first television program without providing the second television program, ***the processor further configured for simultaneously searching at least a portion of the channel table for data related to at least one channel to which a category is assigned and causing display at least one television program***, said processor further configured to receive a selection of a channel category and, in response to receiving selection of the channel category, provide program information associated with at least one channel to which the selected category is assigned.

Applicants respectfully submit that a *prima facie* case of obviousness has not been set forth using the combination of *Lasky* and *Mankovits*. For instance, Applicants respectfully submit that *Lasky* in view of *Mankovitz* fails to disclose, teach, or suggest at least the above-emphasized claim features. The Office Action (page 11) alleges that the claimed “***channel table***” equates to the EPG of *Lasky*. Since it is unclear which EPG of *Lasky* (e.g., internal spreadsheet or master guide) is referenced, Applicants will address the rejection based on each EPG of *Lasky*, starting with the spreadsheet (see, e.g., col. 5, lines 50-63 of *Lasky*).

Applicants respectfully submit that the spreadsheet (EPG) is not the same as or equivalent to the claimed features. The **channel table** recited in claim 98 requires a **plurality of assigned channel categories to television channels**. In contrast, the “spreadsheet” that is caused to be “graphically displayed on the television receiver” (see, col. 5, lines 54-55, *Lasky*) merely has channel numbers, times, and titles. There are no categories provided for in the EPG. Indeed, the “hat” of *Lasky* that includes the “existence of other channels carrying programs in the same category” is “superimposed for a few seconds at the top of the displayed video” (see col. 6, lines 28-30, *Lasky*), and hence is not the EPG. That is, categories are part of the displayed “hat” and not the EPG in *Lasky*. To the extent *Lasky* is relied upon for alleged disclosure of the **channel table** features, Applicants respectfully submit that *Lasky*’s EPG (spreadsheet) does not equate to the claimed “channel table,” and for at least this reason, the rejection should be withdrawn.

Assuming the intent of the Office Action is to equate the master program guide with the claimed **channel table**, Applicants respectfully submit that this equality likewise is in error since there is no disclosure of searching the master simultaneously with the causing of a display. Further, *Lasky* does not disclose or suggest that the master guide comprises **at least one channel entry comprising more than one category** as recited in the amended claim 98. To the extent *Lasky* is relied upon for alleged disclosure of the **channel table** features, Applicants respectfully submit that *Lasky*’s EPG (master guide) does not equate to the claimed “channel table,” and for at least this reason, the rejection should be withdrawn.

In addition, with regard to the simultaneous display/search features, the Office Action (page 12) alleges the following:

(The processor displays a television program and at the same time, searches for other channels carrying programs in the same category – column 6, lines 31-49. The control program also reads the current time

and determines whether any other program is current – column 6, lines 50-67).

Applicants respectfully disagree. The discussion of a search of programs referenced in the above-citations of *Lasky* appears to be directed to a search of database records as described in Figures 9A-9B (see also, cols. 8-9 of *Lasky*), and not a search of the spreadsheet or master guide (EPG). Hence, *Lasky* does not disclose or suggest the claimed simultaneous search of a **portion of the channel table** and display features. For at least this additional reason, Applicants respectfully request that the rejection be withdrawn.

Additionally, the Office Action (page 13) makes the following allegations and acknowledgement of at least some of *Lasky*'s deficiencies as follows:

...said channel table further includes a plurality of respective bit fields, wherein at least one of the bits refers to a predetermined category (col. 5 lines 64-67, col. 6 Lines 1-20, program guide database contains record for each program, figure 5 item 52, col. 5, lines 30-45, data input module 56, col. 6 lines 1-20, receiving program guide information from television distribution network, col. 6, lines 1-20, title field, time slot, end offset, start offset, length, and category information)...However, *Lasky* fails to disclose that said plurality of respective bit fields include a plurality of bits with respective values, wherein each bit value corresponds to a different category, as recited in the claims.

Applicants note that claim 98 does not recite bit fields, but rather, a **bit mask**, which is not disclosed in *Lasky*. Further, the Office Action appears to improperly intermingle the EPG (spreadsheet or master guide) with the database records, which are actually described in *Lasky* as distinct entities. The database records are populated from the extraction of select entries in a received master program guide by the data-input module 56, where the balance of the guide is discarded (see, e.g., col. 6, lines 15-19, *Lasky*).

The Office Action (page 13) uses *Mankovitz* to allegedly remedy the acknowledged deficiencies of *Lasky*, alleging that “Mankovitz discloses that a record for each channel/program includes a listing of a plurality of channels and a respective bit

mask for each channel.” Applicants respectfully disagree. *Mankovitz* does not disclose that a record comprises a **listing** of channels. For instance, the referenced section of *Mankovitz* (col. 49, lines 36-67) does not disclose that each record comprises a listing of channels, but in fact, discloses that “[E]ach television program would correspond to one record of the database,” and that “each record would include a series of boolean fields, each field representing a certain category...” (see, e.g., col. 49, lines 44-50, *Mankovitz*). Further, assume *arguendo* each boolean field can be equated to a **bit mask**. Whereas claim 98 recites **wherein each bit of the bit mask refers to a predetermined category**, *Mankovitz* appears to utilize several fields to cover more than one category (i.e., one field does not equate to several categories).

In addition, even assuming *arguendo* equality between a **bit mask** and the boolean fields of *Mankovits*, Applicants respectfully submit that it is not obvious to “modify the program guide database, as taught by Lasky, using the bit masking technique, as taught by Mankovitz, for the purpose of allowing many different categories to be easily represented and searched, while taking up little space. (Office Action, pages 13-14). For instance, whether dealing with *Mankovitz* or *Lasky*, neither use a **channel table** to initially facilitate searching in the manner claimed, but rather, still rely on interrogation of all the individual database records to perform searching. Claim 98, on the other hand, recites features that rely upon the **channel table** as the basis for the searching. For this additional reason, Applicants respectfully submit that a *prima facie* case of obviousness has not been established, and respectfully request that the rejection be withdrawn.

Independent Claim 100

Claim 100 recites (with emphasis added):

100. In a television network, a terminal for providing television program information and television programs, said terminal comprising:
a memory configured for storing respective program information for a plurality of corresponding television programs and a ***channel table that includes a bit field signifying a plurality of television channel categories***, each television channel category being associated with a corresponding plurality of television channels, ***wherein the channel table includes a listing of a plurality of channels and a respective bit mask for each channel, each bit mask comprising a plurality of single bits with each bit of the bit mask set at one of a plurality of respective values, wherein each bit of the bit mask refers to a predetermined category and wherein the respective value at which each bit is set indicates whether or not the predetermined category corresponding to that bit is assigned to the respective channel***; and
a processor coupled to the memory, said processor configured to:
receive a user-selected television channel category, and
responsive to the receiving the user-selected television channel category, search at least a portion of the channel table and provide program information exclusively for television programs corresponding to television channels associated with the user-selected television channel category,
wherein the processor is configured for simultaneously searching at least a portion of the channel table and causing the display of at least one television program.

Applicants respectfully submit that a *prima facie* case of obviousness has not been set forth using the combination of *Lasky* and *Mankovits*. For instance, Applicants respectfully submit that *Lasky* in view of *Mankovitz* fails to disclose, teach, or suggest at least the above-emphasized claim features. The Office Action (page 14) alleges that the claimed “***channel table***” equates to the EPG of *Lasky*. Since it is unclear which EPG of *Lasky* (e.g., internal spreadsheet or master guide) is referenced, Applicants will address the rejection based on each EPG of *Lasky*, starting with the spreadsheet (see, e.g., col. 5, lines 50-63 of *Lasky*).

Applicants respectfully submit that the spreadsheet (EPG) is not the same as or equivalent to the claimed features. The ***channel table*** recited in claim 100 requires ***a bit***

field signifying a plurality of television channel categories. In contrast, the “spreadsheet” that is caused to be “graphically displayed on the television receiver” (see, col. 5, lines 54-55, *Lasky*) merely has channel numbers, times, and titles. There are no categories provided for in the EPG. Indeed, the “hat” of *Lasky* that includes the “existence of other channels carrying programs in the same category” is “superimposed for a few seconds at the top of the displayed video” (see col. 6, lines 28-30, *Lasky*), and hence is not the EPG. That is, categories are part of the displayed “hat” and not the EPG in *Lasky*. To the extent *Lasky* is relied upon for alleged disclosure of the **channel table** features, Applicants respectfully submit that *Lasky*’s EPG (spreadsheet) does not equate to the claimed “channel table,” and for at least this reason, the rejection should be withdrawn.

Assuming the intent of the Office Action is to equate the master program guide with the claimed **channel table**, Applicants respectfully submit that this equality likewise is in error since there is no disclosure of searching the master simultaneously with the causing of a display. Further, *Lasky* does not disclose or suggest that the master guide comprises **a bit field signifying a plurality of television channel categories** as recited in claim 100. To the extent *Lasky* is relied upon for alleged disclosure of the **channel table** features, Applicants respectfully submit that *Lasky*’s EPG (master guide) does not equate to the claimed “channel table,” and for at least this reason, the rejection should be withdrawn.

In addition, with regard to the simultaneous display/search features, the Office Action (page 15) alleges the following:

(The processor displays a television program and at the same time, searches for other channels carrying programs in the same category – column 6, lines 31-49. The control program also reads the current time and determines whether any other program is current – column 6, lines 50-67).

Applicants respectfully disagree. The discussion of a search of programs referenced in the above-citations of *Lasky* appears to be directed to a search of database records as described in Figures 9A-9B (see also, cols. 8-9 of *Lasky*), and not a search of the spreadsheet or master guide (EPG). Hence, *Lasky* does not disclose or suggest the claimed simultaneous search of a **portion of the channel table** and display features. For at least this additional reason, Applicants respectfully request that the rejection be withdrawn.

Additionally, the Office Action (pages 15-16) makes the following allegations and acknowledgement of at least some of *Lasky*'s deficiencies as follows:

...said channel table further includes a plurality of respective bit fields, wherein at least one of the bits refers to a predetermined category (col. 5 lines 64-67, col. 6 Lines 1-20, program guide database contains record for each program, figure 5 item 52, col. 5, lines 30-45, data input module 56, col. 6 lines 1-20, receiving program guide information from television distribution network, col. 6, lines 1-20, title field, time slot, end offset, start offset, length, and category information)...However, *Lasky* fails to disclose that said plurality of respective bit fields include a plurality of bits with respective values, wherein each bit value corresponds to a different category, as recited in the claims.

The Office Action appears to improperly intermingle the EPG (spreadsheet or master guide) with the database records, which are actually described in *Lasky* as distinct entities. The database records are populated from the extraction of select entries in a received master program guide by the data-input module 56, where the balance of the guide is discarded (see, e.g., col. 6, lines 15-19, *Lasky*). Applicants note that claim 100 requires a **channel table that includes a bit field signifying a plurality of television channel categories**. Even assuming *arguendo* the master guide comprises a category field, such a field is not disclosed as signifying any more than a single category.

The Office Action (page 16) uses *Mankovitz* to allegedly remedy the acknowledged deficiencies of *Lasky*, alleging that "Mankovitz discloses that a record for each channel/program includes a listing of a plurality of channels and a respective bit

mask for each channel.” Applicants respectfully disagree. *Mankovitz* does not disclose that a record comprises a **listing** of channels. For instance, the referenced section of *Mankovitz* (col. 49, lines 36-67) does not disclose that each record comprises a listing of channels, but in fact, discloses that “[E]ach television program would correspond to one record of the database,” and that “each record would include a series of boolean fields, each field representing a certain category...” (see, e.g., col. 49, lines 44-50, *Mankovitz*). Further, assume *arguendo* each boolean field can be equated to a **bit mask**. Whereas claim 100 recites **wherein each bit of the bit mask refers to a predetermined category**, *Mankovitz* appears to utilize several fields to cover more than one category (i.e., one field does not equate to several categories).

In addition, even assuming *arguendo* equality between a **bit mask** and the boolean fields of *Mankovits*, Applicants respectfully submit that it is not obvious to “modify the program guide database, as taught by Lasky, using the bit masking technique, as taught by Mankovitz, for the purpose of allowing many different categories to be easily represented and searched, while taking up little space. (Office Action, page 16). For instance, whether dealing with *Mankovitz* or *Lasky*, neither use a **channel table** to initially facilitate searching in the manner claimed, but rather, still rely on interrogation of all the individual database records to perform searching. Claim 100, on the other hand, recites features that rely upon the **channel table** as the basis for the searching. For this additional reason, Applicants respectfully submit that a *prima facie* case of obviousness has not been established, and respectfully request that the rejection be withdrawn.

Independent Claim 104

Claim 104 recites (with emphasis added):

104. In a television network, a terminal for providing television program information and television programs, said terminal comprising:

a memory configured for storing respective program information for a plurality of corresponding television programs and a ***channel table that includes a bit field signifying a plurality of television channel categories, each television channel category being associated with a corresponding plurality of television channels, wherein the channel table includes a listing of a plurality of channels and respective bit mask for each channel, each bit mask comprising a plurality of single bits with each bit of the bit mask set at one of a plurality of respective values, wherein each bit of the bit mask refers to a predetermined category and wherein the respective value at which each bit is set indicates whether or not the predetermined category corresponding to that bit is assigned to the respective channel***; and

a processor, coupled to the memory, said processor configured to ***simultaneously search at least a portion of the channel table and cause display of at least one television program***, the processor further configured to receive selection of a channel category and provide program information associated with at least one channel to which the selected channel category is assigned.

Applicants respectfully submit that a *prima facie* case of obviousness has not been set forth using the combination of *Lasky* and *Mankovits*. For instance, Applicants respectfully submit that *Lasky* in view of *Mankovitz* fails to disclose, teach, or suggest at least the above-emphasized claim features. The Office Action (pages 16-17) alleges that the claimed “***channel table***” equates to the EPG of *Lasky*. Since it is unclear which EPG of *Lasky* (e.g., internal spreadsheet or master guide) is referenced, Applicants will address the rejection based on each EPG of *Lasky*, starting with the spreadsheet (see, e.g., col. 5, lines 50-63 of *Lasky*).

Applicants respectfully submit that the spreadsheet (EPG) is not the same as or equivalent to the claimed features. The ***channel table*** recited in claim 104 requires a ***bit field signifying a plurality of television channel categories***. In contrast, the “spreadsheet” that is caused to be “graphically displayed on the television receiver” (see,

col. 5, lines 54-55, *Lasky*) merely has channel numbers, times, and titles. There are no categories provided for in the EPG. Indeed, the “hat” of *Lasky* that includes the “existence of other channels carrying programs in the same category” is “superimposed for a few seconds at the top of the displayed video” (see col. 6, lines 28-30, *Lasky*), and hence is not the EPG. That is, categories are part of the displayed “hat” and not the EPG in *Lasky*. To the extent *Lasky* is relied upon for alleged disclosure of the **channel table** features, Applicants respectfully submit that *Lasky*’s EPG (spreadsheet) does not equate to the claimed “channel table,” and for at least this reason, the rejection should be withdrawn.

Assuming the intent of the Office Action is to equate the master program guide with the claimed **channel table**, Applicants respectfully submit that this equality likewise is in error since there is no disclosure of searching the master simultaneously with the causing of a display. Further, *Lasky* does not disclose or suggest that the master guide comprises **a bit field signifying a plurality of television channel categories** as recited in claim 104. To the extent *Lasky* is relied upon for alleged disclosure of the **channel table** features, Applicants respectfully submit that *Lasky*’s EPG (master guide) does not equate to the claimed “channel table,” and for at least this reason, the rejection should be withdrawn.

In addition, with regard to the simultaneous display/search features, the Office Action (page 17) alleges the following:

(The processor displays a television program and at the same time, searches for other channels carrying programs in the same category – column 6, lines 31-49. The control program also reads the current time and determines whether any other program is current – column 6, lines 50-67).

Applicants respectfully disagree. The discussion of a search of programs referenced in the above-citations of *Lasky* appears to be directed to a search of database records as

described in Figures 9A-9B (see also, cols. 8-9 of *Lasky*), and not a search of the spreadsheet or master guide (EPG). Hence, *Lasky* does not disclose or suggest the claimed simultaneous search of a ***portion of the channel table*** and display features. For at least this additional reason, Applicants respectfully request that the rejection be withdrawn.

Additionally, the Office Action (page 18) makes the following allegations and acknowledgement of at least some of *Lasky*'s deficiencies as follows:

...said channel table further includes a plurality of respective bit fields, wherein at least one of the bits refers to a predetermined category (col. 5 lines 64-67, col. 6 Lines 1-20, program guide database contains record for each program, figure 5 item 52, col. 5, lines 30-45, data input module 56, col. 6 lines 1-20, receiving program guide information from television distribution network, col. 6, lines 1-20, title field, time slot, end offset, start offset, length, and category information)...However, *Lasky* fails to disclose that said plurality of respective bit fields include a plurality of bits with respective values, wherein each bit value corresponds to a different category, as recited in the claims.

The Office Action appears to improperly intermingle the EPG (spreadsheet or master guide) with the database records, which are actually described in *Lasky* as distinct entities. The database records are populated from the extraction of select entries in a received master program guide by the data-input module 56, where the balance of the guide is discarded (see, e.g., col. 6, lines 15-19, *Lasky*). Applicants note that claim 104 requires a ***channel table that includes a bit field signifying a plurality of television channel categories***. Even assuming *arguendo* the master guide comprises a category field, such a field is not disclosed as signifying any more than a single category.

The Office Action (page 18) uses *Mankovitz* to allegedly remedy the acknowledged deficiencies of *Lasky*, alleging that "Mankovitz discloses that a record for each channel/program includes a listing of a plurality of channels and a respective bit mask for each channel." Applicants respectfully disagree. *Mankovitz* does not disclose that a record comprises a ***listing*** of channels. For instance, the referenced section of

Mankovitz (col. 49, lines 36-67) does not disclose that each record comprises a listing of channels, but in fact, discloses that “[E]ach television program would correspond to one record of the database,” and that “each record would include a series of boolean fields, each field representing a certain category...” (see, e.g., col. 49, lines 44-50, *Mankovitz*). Further, assume *arguendo* each boolean field can be equated to a **bit mask**. Whereas claim 104 recites **wherein each bit of the bit mask refers to a predetermined category**, *Mankovitz* appears to utilize several fields to cover more than one category (i.e., one field does not equate to several categories).

In addition, even assuming *arguendo* equality between a **bit mask** and the boolean fields of *Mankovitz*, Applicants respectfully submit that it is not obvious to “modify the program guide database, as taught by Lasky, using the bit masking technique, as taught by *Mankovitz*, for the purpose of allowing many different categories to be easily represented and searched, while taking up little space. (Office Action, page 19). For instance, whether dealing with *Mankovitz* or *Lasky*, neither use a **channel table** to initially facilitate searching in the manner claimed, but rather, still rely on interrogation of all the individual database records to perform searching. Claim 104, on the other hand, recites features that rely upon the **channel table** as the basis for the searching. For this additional reason, Applicants respectfully submit that a *prima facie* case of obviousness has not been established, and respectfully request that the rejection be withdrawn.

2. Claim 93 - 35 U.S.C. § 103(a) - *Lasky* in view of *Mankovitz* and in further view of *Amano*

As set forth above in association with independent claim 82, Applicants respectfully submit that *Lasky* in view of *Mankovitz* fails to disclose, teach, or suggest at least the above-emphasized claim features. *Amano* fails to remedy the above-described deficiencies

of *Lasky* and *Mankovitz*. For at least the reason that claim 82 is allowable over *Lasky* in view of *Mankovitz* and in further view of *Amano*, Applicants respectfully submit that dependent claim 93 is allowable as a matter of law.

3. Claims 96, 99, 101-103 and 105 - 35 U.S.C. § 103(a) - *Lasky* in view of *Mankovitz* and in further view of *Yuen*

Claims 96, 99, 101, and 105

As set forth above in association with independent claims 95, 98, 100, and 104, Applicants respectfully submit that *Lasky* in view of *Mankovitz* fails to disclose, teach, or suggest at least the above-emphasized claim features. *Yuen* fails to remedy the above-described deficiencies of *Lasky* and *Mankovitz*. For at least the reason that claims 95, 98, 100, and 104 are allowable over *Lasky* in view of *Mankovitz* and in further view of *Yuen*, Applicants respectfully submit that dependent claims 96, 99, 101, and 105 are allowable as a matter of law.

Independent Claim 102

Claim 102 recites (with emphasis added):

102. In a television network, a terminal for providing television program information and television programs, said terminal comprising:

an interface for receiving data from the television network, said interface being capable of receiving a first data and a second data, said first data including respective program information for a plurality of corresponding television programs, said ***second data comprising a channel table that includes a bit mask signifying a plurality of channel categories, each channel category being associated with a corresponding plurality of television channels, said plurality of channel categories including a first category***; and

a processor configured to:

receive a first user input corresponding to the assignment of the first channel category to a first television channel,

responsive to the receiving the first user input, store the association of the first channel category and the first television channel in the memory,

receive a second user input corresponding to the first channel category,

responsive to the receiving the second user input, simultaneously search at least a portion of the channel table and cause the display of at least one television program,

receive third user input corresponding to selection of a channel category, and

responsive to receiving the third user input, providing program information associated with at least one channel to which the selected channel category is assigned,

wherein the channel table includes a listing of a plurality of channels and a respective bit mask for each channel, each bit mask comprising a plurality of single bits with each bit of the bit mask set at one of a plurality of respective values, wherein each bit of the bit mask refers to a predetermined category and wherein the respective value at which each bit is set indicates whether or not the predetermined category corresponding to that bit is assigned to the respective channel.

Applicants respectfully submit that a *prima facie* case of obviousness has not been set forth using the combination of *Lasky*, *Mankovits*, and *Yuen*. For instance, Applicants respectfully submit that *Lasky* in view of *Mankovitz* and further in view of *Yuen* fails to disclose, teach, or suggest at least the above-emphasized claim features. The Office Action (page 21) alleges that the claimed ***first data*** equates to program guide information and the ***second data*** to the EPG. It is noted that claim 102 requires an ***interface*** to the network

that receives the **first** and **second** (including the channel table) data. Accordingly, the ambiguity in the Office Action as to what constitutes the **first** and **second data**, as described in association with the response to the rejection of claim 82, is absent here. That is, the only program guide-related information disclosed as being received from the distribution network is the master guide (see, e.g., col. 6, lines 1-19, *Lasky*) from which program guide information is later extracted.

Applicants respectfully submit that the Office Action has taken an unreasonably broad interpretation of **first** and **second data**, since evidently, it is one data that has been received from the distribution network in *Lasky*, namely – EPG data (in the form of a master guide). One would not reasonably allege that a table is received as second data and that information in the table is received as first data. Not only is this interpretation presented in the Office Action unreasonable, it is not one which would reasonably be taken by one having ordinary skill in the art in the context of Applicants' specification. For instance, Applicants' disclosure (and claim 102) provides an embodiment where first and second data are received (see, e.g., page 8, lines 3-21). As set forth in MPEP 2111 and well-established Federal case law:

The Patent and Trademark Office ("PTO") determines the scope of claims in patent applications not solely on the basis of the claim language, but upon giving claims their broadest reasonable construction "in light of the specification as it would be interpreted by one of ordinary skill in the art." *In re Am. Acad. of Sci. Tech. Ctr.*, 367 F.3d 1359, 1364[, 70 USPQ2d 1827] (Fed. Cir. 2004).

Accordingly, Applicants respectfully request that the rejection be withdrawn.

In addition, with regard to the simultaneous display/search features, the Office Action (page 22) alleges the following:

(The processor displays a television program and at the same time, searches for other channels carrying programs in the same category – column 6, lines 31-49. The control program also reads the current time and determines whether any other program is current – column 6, lines 50-67).

Applicants respectfully disagree, and respectfully submit that the improper construction of the claims as described above has rendered this argument both invalid and/or unreasonable. That is, the citations to *Lasky* appear to pertain to searches of database records to provide for sideways scrolls, and do not involve the received master guide (assuming *arguendo* equivalent to the claimed channel table). For at least this additional reason, Applicants respectfully request that the rejection be withdrawn.

Additionally, the Office Action (pages 23-24) makes the following allegations and acknowledgement of at least some of *Lasky*'s deficiencies as follows:

...said channel table further includes a plurality of respective bit fields, wherein at least one of the bits refers to a predetermined category (col. 5 lines 64-67, col. 6 Lines 1-20, program guide database contains record for each program, figure 5 item 52, col. 5, lines 30-45, data input module 56, col. 6 lines 1-20, receiving program guide information from television distribution network, col. 6, lines 1-20, title field, time slot, end offset, start offset, length, and category information)...However, *Lasky* fails to disclose that said plurality of respective bit fields include a plurality of bits with respective values, wherein each bit value corresponds to a different category, as recited in the claims.

Applicants note that claim 102 does not recite bit fields, but rather, a **bit mask**, which is not disclosed in *Lasky*. Further, the Office Action appears to improperly intermingle the EPG (spreadsheet or master guide) with the database records, which are actually described in *Lasky* as distinct entities. The database records are populated from the extraction of select entries in a received master program guide by the data-input module 56, where the balance of the guide is discarded (see, e.g., col. 6, lines 15-19, *Lasky*).

The Office Action (page 24) uses *Mankovitz* to allegedly remedy the acknowledged deficiencies of *Lasky*, alleging that "Mankovitz discloses that a record for each channel/program includes a listing of a plurality of channels and a respective bit mask for each channel." Applicants respectfully disagree. *Mankovitz* does not disclose that a record comprises a **listing** of channels. For instance, the referenced section of

Mankovitz (col. 49, lines 36-67) does not disclose that each record comprises a listing of channels, but in fact, discloses that “[E]ach television program would correspond to one record of the database,” and that “each record would include a series of boolean fields, each field representing a certain category...” (see, e.g., col. 49, lines 44-50, *Mankovitz*). Further, assume *arguendo* each boolean field can be equated to a **bit mask**. Whereas claim 102 recites **each bit of the bit mask refers to a predetermined category**, *Mankovitz* appears to utilize several fields to cover more than one category (i.e., one field does not equate to several categories).

In addition, even assuming *arguendo* equality between a **bit mask** and the boolean fields of *Mankovitz*, Applicants respectfully submit that it is not obvious to “modify the program guide database, as taught by Lasky, using the bit masking technique, as taught by Mankovitz, for the purpose of allowing many different categories to be easily represented and searched, while taking up little space.” (Office Action, pages 24-25). For instance, whether dealing with *Mankovitz* or *Lasky*, neither use a **channel table** to initially facilitate searching in the manner claimed, but rather, still rely on interrogation of the individual database records to perform searching. Claim 102, on the other hand, recites features that rely upon the channel table as the basis for the searching. For this additional reason, and since the addition of *Yuen* does not remedy the deficiencies of *Mankovitz* and *Lasky*, Applicants respectfully submit that a *prima facie* case of obviousness has not been established, and respectfully request that the rejection be withdrawn.

Because independent claim 102 is allowable over *Lasky* in view of *Mankovitz* and *Yuen*, dependent claim 103 is allowable as a matter of law.

In summary, it is Applicants’ position that a *prima facie* for obviousness has not been made against Applicants’ claims. Therefore, it is respectfully submitted that each of

these claims is patentable over the cited art of record and that the rejection of these claims should be withdrawn.

II. New Claims

As identified above, claims 106 and 107 have been added into the application through this response. Applicants respectfully submit that these new claims describe embodiments that are novel and unobvious in view of the cited art of record and, therefore, respectfully request that these claims be held to be allowable. For instance, claims 106 and 107 are allowable for at least the reasons that the cited art of record fails to disclose, teach, or suggest at least “a memory configured for storing respective program information for a plurality of corresponding television programs and a ***channel table that includes respective associations of one or more channel categories for a plurality of corresponding television channels, the channel table comprising at least one channel entry comprising more than one category,***” (claim 106) or “a memory configured for storing respective program information for a plurality of corresponding television programs and ***a channel table that includes respective associations of one or more channel categories for a plurality of corresponding television channels, wherein the channel table includes a listing of a plurality of channels and a respective bit mask for each channel, each bit mask comprising a plurality of single bits with each bit of the bit mask set at one of a plurality of respective values, wherein each bit of the bit mask refers to a predetermined category and wherein the respective value at which each bit is set indicates whether or not the predetermined category corresponding to that bit is assigned to the respective channel, the channel table comprising at least one channel entry comprising more***

than one category,” (claim 107) for at least the reasons presented above in association with one or more of the independent claims.

CONCLUSION

Applicants respectfully submit that Applicants' pending claims are in condition for allowance. Any other statements in the Office Action that are not explicitly addressed herein are not intended to be admitted. In addition, any and all findings of inherency are traversed as not having been shown to be necessarily present. Furthermore, any and all findings of well-known art and official notice, and similarly interpreted statements, should not be considered well known since the Office Action does not include specific factual findings predicated on sound technical and scientific reasoning to support such conclusions. Favorable reconsideration and allowance of the present application and all pending claims are hereby courteously requested. If, in the opinion of the Examiner, a telephonic conference would expedite the examination of this matter, the Examiner is invited to call the undersigned attorney at (770) 933-9500.

Respectfully submitted,

/dr/

David Rodack
Registration No. 47,034

**THOMAS, KAYDEN,
HORSTEMEYER & RISLEY, L.L.P.**
Suite 1500
600 Galleria Parkway
Atlanta, Georgia 30339
(770) 933-9500